

RX-779

**HIGH-POWER DIGITAL
AUTO-REVERSE
CASSETTE RECEIVER
with REMOVABLE
FRONT PANEL and
CD CHANGER CONTROL**

4260 Charter Street
Vernon, CA, 90058-2596, U.S.A.

TEL: 800-227-8879 or 213-582-2832
FAX: 213-582-4328
TLX: 910-240-6376

A DIVISION OF CONCEPT ENTERPRISES, INC.
COPYRIGHT © 1993
BY CONCEPT ENTERPRISES, INC.
ALL RIGHTS RESERVED

CONGRATULATIONS...

On purchasing a Coustic state-of-the-art digital FM/AM cassette car audio unit. Your choice indicates a genuine appreciation for fine music reproduction.

Whether you are adding your Coustic FM/AM cassette receiver to an existing system or installing a completely new system, you are certain to notice immediate performance benefits. Our unique tape transport with Auto-Aligner Azimuth™ system produces crystal clear sound at all frequencies. This removable front panel, high-power car radio cassette/receiver features 30 Preset Stations with Automatic Station Memory, Preset Scan, Tape Program Search, Dolby® B Noise Reduction, Metal Tape Equalization, Active Bass/Treble Tone Controls and 10-Disc CD changer controls assure that you are receiving the best performance possible from your car audio system.

But Coustic does not just manufacture full-featured FM/AM radio/cassette units. We also manufacture a state-of-the-art Real Time Analyzer for sound system diagnosis, full-featured AM/FM/CD receivers, high performance power amplifiers, award-winning electronic crossovers and dynamic hi-fi component speakers. Coustic has everything you need to create the ultimate car audio system.

Coustic... a sound investment.

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of CONCEPT ENTERPRISES, INC.

Please take a moment to complete and mail in the Warranty Registration Card, and record the serial number in the space provided below. This information may be useful in recovering your unit if it is ever stolen.

Serial No. _____ Date of Purchase: _____

TABLE OF CONTENTS

Section	Page
FEATURES OF THE RX-779	4
CONTROLS AND INDICATORS	6
Front Panel Controls	6
LCD Display	9
OPERATION	10
Audio Adjustment	10
CD Changer Operation	10
Tuner Operation	11
Tape Operation	12
Auxiliary Input	13
Digital Clock Setting	13
INSTALLATION PREPARATION	14
MECHANICAL INSTALLATION PROCEDURES	14
Mounting Location	14
Installation of Main Unit	15
Installation and Removal of Front Panel	16
ELECTRICAL INSTALLATION PROCEDURES	17
Electrical Wiring Precautions	17
Wiring Descriptions	17
Electrical Wiring Diagrams	18
Aux Input Terminal	20
FINAL SYSTEM CHECK	20
Preliminary Check	20
Noise Check	20
CARE AND MAINTENANCE	21
Fuse Replacement	21
TROUBLE SHOOTING GUIDE	22
SPECIFICATIONS	24

HIGHLIGHTS

- Built-In 10-Disc CD changer Control
- Disc/Track Scan
- Shuffle Play
- Disc/Track Search
- Disc/Track Repeat
- Backward/Forward Music Search
- Disc/Track Skip
- 10-Track Programmable Memory
- PLL Quartz Synthesizer Tuning
- Advanced FM Optimizer VI Circuitry
- 30 Memory Preset Stations (18 FM, 12 AM)
- Preset Scan
- Automatic Station Memory
- Automatic Seek & Manual Tuning
- Automatic FM Mono/Stereo
- Auto Reverse
- Locking Fast Forward & Rewind
- Auto-Aligned Azimuth System
- Tape Program Search
- Dolby® B Noise Reduction System
- Metal Tape Equalization
- Active Bass & Treble Tone Controls
- Loudness Control
- Fader Control
- Front/Rear Pre-Amp Outputs
- 4- or 2- Speaker Outputs
- Removable Front Panel for maximum security
- Digital Clock
- Remote Amplifier Lead

® Dolby Noise Reduction manufactured under License from
Dolby Laboratories Licensing Corporation.
Dolby and the double D symbol  are registered trademarks
of Dolby Laboratories Licensing Corporation.

FEATURES

BUILT-IN CD CHANGER CONTROL

This radio/cassette head unit provides quick and convenient manipulation of the Coustic 10-Disc changer model CC-101, or other compatible changer models. Functions that this unit provides are Track/Disc Scan, Track/Disc Repeat, Track Shuffle, Backward/Forward Music Search, Track/Disc Skip, and 10-track Programmable memory.

INTRO SCAN FOR TRACK AND DISC

Intro Scan lets you scan and play the first 10 seconds of each track on a compact disc or the first 10 seconds of each disc. You can use Intro Scan to briefly audition a track or disc before deciding whether to play or skip it.

TRACK SHUFFLE PLAY

Shuffle Play lets you shuffle the playing order of tracks on the compact discs you listen to most. You'll find this feature reduces the monotony of listening to a disc in the same order each time.

REPEAT FOR TRACK AND DISC

The Repeat function lets you listen to a favorite track on a disc or an entire disc over and over again.

BACKWARD/FORWARD MUSIC SEARCH

This feature allows you to search forward or backward at 20 times normal playback speed to quickly find a particular section of a track.

TRACK SKIP/DISC SKIP

Track Skip/Disc Skip lets you advance play to the next consecutive track or disc. This is a convenient way of avoiding tracks/discs that you don't want to listen to and advance to others.

10-TRACK PROGRAMMABLE MEMORY

You can program your most favorite cuts (up to 10 tracks) from the loaded discs into memory for playback.

PLL QUARTZ SYNTHESIZER TUNING

The Coustic RX-779 is equipped with a sophisticated phase-lock-loop (PLL) quartz synthesizer tuner and a microprocessor to provide extremely accurate tuning.

ADVANCED FM OPTIMIZER VI CIRCUITRY

The new RX-779 features an improved dual MOSFET, Balanced Mixer, Low Noise Tuned Front End, redesigned Advanced FM Optimizer VI Circuitry, coupled with Keyed Automatic Gain Control (AGC) and new IF Circuitry. This advanced circuitry design continuously monitors FM signal strength, adjusts stereo separation, audio bandwidth and audio level to guarantee the best wide band signal-to-noise ratio and to eliminate the picket-fencing effects of multi-path reception. The end result is more dynamic range of signal processing and further enhancement of S.N.C. operation.

30 MEMORY PRESET STATIONS with PRESET SCAN

The RX-779 features 30 Selectable Preset Station Memories (18 FM and 12 AM) with Last Station Memory. This function lets you quickly and easily access up to 30 of your favorite radio stations without tuning. Preset stations can be accessed by pressing the corresponding Memory button or through the Preset Scan function.

AUTOMATIC STATION MEMORY

Automatic Station Memory lets the tuner automatically store the six strongest AM or six strongest FM stations in any given area. This feature is very convenient when you are unfamiliar with stations in an area where you are traveling.

AUTOMATIC SEEK AND MANUAL TUNING

You can "tune-in" radio stations two ways, either by Manual Tuning (manual scanning of the frequency band) or with Automatic Seek. Automatic Seek Tuning searches the selected frequency bandwidth and stops when a radio station is detected.

AUTOMATIC FM MONO/STEREO SWITCHING

The Automatic FM Stereo/Mono switching circuit allows optimal tuner sound quality, even under weak signal situations.

AUTO REVERSE

The RX-779 employs a highly reliable auto reverse tape mechanism with a high quality permalloy tape head to ensure playback frequency response rolloff at 18 KHz (-5 dB) for both left and right channels. Tape direction can also be changed at any time during playback operation by simply pushing program buttons.

AUTO-ALIGNED AZIMUTH SYSTEM

To solve the perennial problem of tape head misalignment after prolonged use, Coustic has incorporated the Auto Aligned Azimuth™ System into the RX-779's cassette mechanism to minimize the possibility of high frequency loss while delivering 3-dimensional "life-like" sonic performance.

TAPE PROGRAM SEARCH

The RX-779 is equipped with a Tape Program Search feature. When TPS is activated, the tape mechanism will automatically search in either direction for other songs on the tape. It provides a fast and convenient way to search for tape programs.

DOLBY® B NOISE REDUCTION SYSTEM

This unit provides Dolby® B Noise Reduction System for cassette playback. The Dolby® NR System assures low noise music reproduction and a wider dynamic range.

METAL TAPE EQUALIZATION

The RX-779 tape equalization is switchable for playback of standard or high bias (high quality or metal) cassette tapes. High bias or high quality metal tapes may be played by setting this switch at 70µS, while standard tapes require a 120µS setting.

FEATURES

ACTIVE BASS AND TREBLE TONE CONTROLS

Special tone control circuits which utilize an operational amplifier based on analog computer technology provide a buffer, an active tone equalizer, a line driver, and an audio amplifier. This special circuit produces extra amplifier headroom for lower noise and far wider dynamic range than was possible with other designs.

LOUDNESS CONTROL

Your RX-779 has a built-in Loudness Control (Fletcher-Munson type) which automatically compensates for low volume loss of audible bass and treble frequencies. You can easily activate this special circuit by pressing the Loudness Control button.

FADER CONTROL

SPEAKERS — In 4-channel operation, the Fader Control functions as Front/Rear Fader and can be used to balance the relative output level of front and rear speakers.

PRE-AMP — In either 4- or 2-channel operation, the Fader Control adjusts the relative level of front and rear pre-amp outputs.

FRONT/REAR PRE-AMP OUTPUTS

The RX-779 has built-in Front/Rear Pre-Amp Outputs which allow easy connection to external power amplifiers.

4- OR 2- SPEAKER OUTPUTS

The RX-779 can be used as either a 4-Channel System with rated power output of 5 watts per channel or as a High Power 2-Channel System with a rated power output of 15 watts per channel.

REMOVABLE FRONT PANEL

The RX-779 front panel can be removed for security. It can be carried around safely inside the carrying case (supplied) for protection against dust and scratches.

CONTROLS AND INDICATORS

A. FRONT PANEL CONTROLS

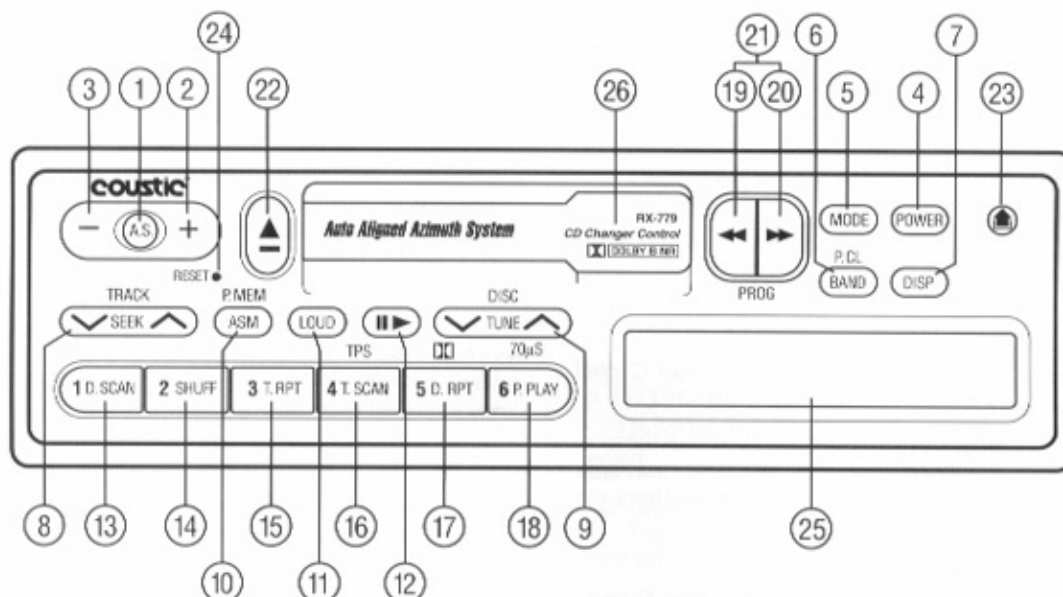


Figure 1. RX-779 Control Panel.

1. **AUDIO FUNCTION SELECT BUTTON (A.S.)**
Select volume, bass, treble, balance and fader adjustment by pressing this button. The selected function will be indicated on the LCD.
2. **UP ADJUST BUTTON (+)**
Increase volume, bass and treble level by pressing this button. Use this button also to shift balance control to the right and fader control to rear.
3. **DOWN ADJUST BUTTON (-)**
Decrease volume, bass and treble level by pressing this button. Use this button also to shift balance control to the left and fader control to front.
4. **POWER ON-OFF BUTTON (POWER)**
Press the button once to turn unit on. Press again to turn unit off.
5. **MODE SELECT BUTTON (MODE)**
Select between tuner and CD changer (or TAPE and CD changer) mode by pressing this button.
Note: If CD changer is not installed, pressing the **MODE** button in TUNER (or TAPE) mode will change to CD (AUX) input mode for external CD player or CD changer.
6. **BAND SELECTOR/PROGRAM CLEAR BUTTON (BAND/P.CL)**
In tuner mode, use the **BAND** button to select the correct frequency band you want to perform the function on.







In CD changer mode, press this button once to prepare to clear program memory. Press the button again to confirm the program clear function.
7. **DISPLAY MODE SELECT BUTTON (DISP)**
In tuner mode, press this button to review the frequency being tuned. The LCD will return to display time after 5 seconds.




In CD changer mode, press this button to display the lapse time of the track being played.
8. **UP/DOWN SEEK TUNING — UP/DOWN TRACK SELECT BUTTON (∇ SEEK \wedge)**
In tuner mode, press the (∇ SEEK \wedge) button once to activate automatic search up the frequency band. Press the (∇ SEEK) button to search down the frequency band.

In CD changer mode, press the (∇ TRACK \wedge) button to advance to the next track. Press the (∇ TRACK) button to return to the beginning of the track being played.

CONTROLS AND INDICATORS

9. UP/DOWN MANUAL TUNING — UP/DOWN DISC SELECT and FORWARD/BACKWARD MUSIC SEARCH BUTTON (TUNE)

In tuner mode, press and release the ( TUNE ) or ( TUNE) button for single step tuning. UP or DOWN manual tuning will stop as soon as the respective button is released. Press and hold the ( TUNE ) button or the ( TUNE) button to speed tune up or down the selected band.

In CD changer mode, press the ( DISC ) button to skip to the next loaded disc in the magazine, or press the ( DISC) button to return to the previous disc. Press and hold either the UP or DOWN button for more than 2 seconds will initiate forward or backward audible music search.

10. AUTOMATIC STATION MEMORY/PRESET SCAN/ PROGRAM MEMORY BUTTON (ASM/P.MEM)


In tuner mode, Press the **ASM** button once to start the Preset Scan function. Press and hold the **ASM** button for at least two seconds to activate the Automatic Station Memory (ASM) function. The tuner will search through the waveband and store the strongest 6 stations into preset memories.

In CD changer mode, use this button in conjunction with track/disc selection buttons to store up to 10 tracks among the loaded discs into Program Memory.

11. LOUDNESS CONTROL (LOUD)

Press the **LOUD** button to activate the Loudness Control circuit. Press the **LOUD** button again to deactivate the Loudness Control circuit.

12. CD PLAY/PAUSE BUTTON ()

In CD changer mode, press this button once to pause the playback function. Press the  button again to resume playback.

13. DISC SCAN/PRESET STATION #1 BUTTON (1 D.SCAN)

In CD changer mode, press the **1 D.SCAN** button once to perform DISC SCAN function. The changer will begin playback the first track of the disc for 10 seconds. After that, it will skip to the next loaded disc and begin playback the first track for 10 seconds. Press **1 D.SCAN** again to deactivate this function.

By pressing and holding this button for more than 2 seconds, the changer will proceed to DISC #1 and start playback from the first track.

When unit is operating in Tuner Mode, this button functions as #1 Memory Preset or Recall button.

14. SHUFFLE/PRESET STATION #2 BUTTON (2 SHUFF)

In CD changer mode, press the **2 SHUFF** button once to activate TRACK SHUFFLE function. The changer will randomly playback all the tracks in the current disc until each track has been played once. The TRACK SHUFFLE function will repeat unless it is deactivated.

By pressing and holding **2 SHUFF** for more than 2 seconds the changer will proceed to DISC #2 and start playback from the first track.

When unit is operating in Tuner Mode, this button functions as #2 Memory Preset or Recall button.

15. TRACK REPEAT/PRESET STATION #3 BUTTON (3 T.RPT)

In CD changer mode, press the **3 T.RPT** button once to repeat current track playback. The TRACK REPEAT function will continue indefinitely unless it is de-activated.



By pressing and holding **3 T.RPT** for more than 2 seconds the changer will proceed to DISC #3 and start playback from the first track.

When unit is operating in Tuner Mode, this button functions as #3 Memory Preset or Recall button.

16. TRACK SCAN/TAPE PROGRAM SEARCH/ PRESET STATION #4 BUTTON (4 T.SCAN/TPS)

In CD changer mode, press the **4 T.SCAN/TPS** button once to perform TRACK SCAN function. The changer will begin playback the first track of the disc for 10 seconds. After that it will advance to the next track and begin playback for 10 seconds. Press this button again to de-activate this function.

By pressing and holding **4 T.SCAN/TPS** for more than 2 seconds, the changer will proceed to DISC #4 and start playback from the first track.

When unit is operating in Tape Mode, this button functions as a Tape Program Search Selector. Used in conjunction with the Fast Forward () or Fast Rewind () button it rapidly scans tape programs forward or backwards and stops at the next or beginning of the current song in the direction selected.

When unit is operating in Tuner Mode, this button functions as #4 Memory Preset or Recall button.

CONTROLS AND INDICATORS

17. DISC REPEAT/DOLBY® B NOISE REDUCTION SELECTOR/PRESET STATION #5 BUTTON (5 D.RPT/□)

In CD changer mode, press the 5 D.RPT/□ button once to repeat current disc playback. The DISC REPEAT function will continue indefinitely unless it is de-activated.

By pressing and holding 5 D.RPT/□ for more than 2 seconds, the changer will proceed to DISC #5 and start playback from the first track.

When unit is operating in Tape Mode, this button functions as Dolby® B Noise Reduction Selector. Press the button once for playback of tapes recorded with Dolby® B NR system. Press the button again to deactivate Dolby® NR.

In Tuner Mode, this button functions as #5 Memory Preset or Recall button.

18. PROGRAM PLAY/METAL TAPE SELECTOR/ PRESET STATION #6 BUTTON (6 P.PLAY/70μS)

In CD changer mode, press the 6 P.PLAY/70μS button once to begin PROGRAM PLAY function.

Press and hold 6 P.PLAY/70μS for more than 2 seconds will cause the changer to proceed to DISC #6 and start playback from the first track.

When the unit is operating in Tape Mode, this button functions as a Metal Tape selector.

In Tuner Mode, this button functions as #6 Memory Preset or Recall button.

19. FAST REWIND BUTTON (◀◀)

Push the Fast Rewind ◀◀ button for fast rewind of a loaded cassette. The ◀◀ button will lock. To release locking of the Fast Rewind mechanism, depress the Fast Forward ▶▶ button slightly and cassette will resume normal playback.

20. FAST FORWARD BUTTON (▶▶)

Push the Fast Forward ▶▶ button for fast advance of a loaded cassette. The ▶▶ button will lock. To release locking of the Fast Forward mechanism, depress the Fast Rewind ◀◀ button slightly and cassette will resume normal playback.

21. PROGRAM BUTTON (PROG)

Press the Fast Forward ▶▶ and Fast Rewind ◀◀ buttons simultaneously to reverse program direction of a cassette tape. This function lets you conveniently switch to the other side of the loaded cassette for immediate playback.

22. EJECT BUTTON (▲)

Push the ▲ button in to eject a loaded tape.

23. FRONT PANEL RELEASE BUTTON (■)

Push the ■ button to detach front panel from main unit for maximum security.

24. RESET BUTTON (RESET)

The RESET button is recessed to prevent accidental engagement, and must be activated with a pen tip or some other pointed object. It should only be used in special circumstances (Refer to OPERATION section for more details).

25. LCD READOUT

Displays all audio, tuner, tape and CD changer functions.

26. CASSETTE TAPE SLOT

CONTROLS AND INDICATORS

B. LCD DISPLAY

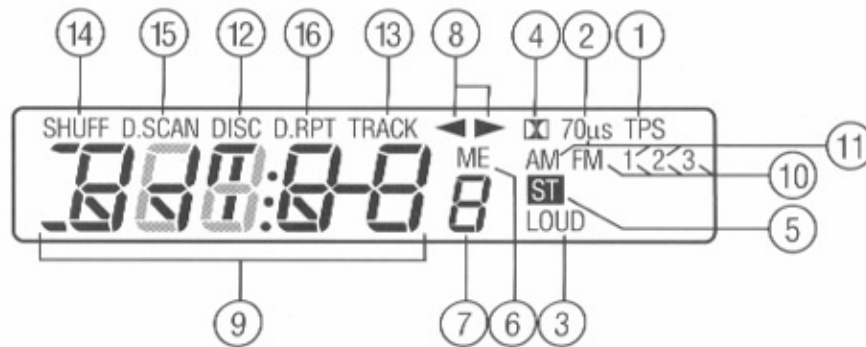


Figure 2. RX-779 LCD Display.

1. **TAPE PROGRAM SEARCH INDICATOR (TPS)**
Indicates that the Tape Program Search function is activated.
2. **METAL TAPE EQUALIZATION INDICATOR (70μS)**
Indicates that the Metal Tape Equalization circuit is activated for playback of high bias (70μS) metal tape.
3. **LOUDNESS CONTROL INDICATOR (LOUD)**
Indicates that the Loudness Control circuit is activated.
4. **DOLBY® B NR INDICATOR ([X])**
Indicates that the Dolby® B Noise Reduction circuit is activated for playback of tapes recorded with Dolby® B Noise Reduction system.
5. **FM STEREO INDICATOR ([ST])**
When the FM signal is in Stereo Mode, the [ST] indicator will appear on the LCD display. When the FM signal is in Mono Mode or if the receiving signal is too weak for stereo separation, the tuner will switch to mono reception and the [ST] indicator will disappear.
6. **MEMORY INDICATOR (ME)**
Indicates that the tuned frequency is stored in the Preset Memory.
7. **PRESET STATION IDENTIFICATION INDICATOR**
Indicates that Preset Memory Number (1-6) is being recalled or programmed.
8. **TAPE DIRECTION INDICATORS (◀ ▶)**
The ▶ arrow on the right indicates that tape is running in forward direction. The ◀ arrow on the left indicates that tape is running in reverse direction.
9. **MULTI-FUNCTION TUNER/CD CHANGER/ AUDIO STATUS/CLOCK DISPLAY**
Indicates the currently tuned frequency, the currently played disc and track number, audio status as well as the time of the day.
10. **FM BAND INDICATOR (FM 1, 2 or 3)**
Indicates that the tuner is operating in FM Reception Mode.
11. **AM BAND INDICATOR (AM 1 or 2)**
Indicates that the tuner is operating in AM Reception Mode.
12. **DISC INDICATOR (DISC)**
Indicates the selected disc number.
13. **TRACK INDICATOR (TRACK)**
Indicates the selected track number.
14. **SHUFFLE INDICATOR (SHUFF)**
Indicates that Shuffle track function is activated.
15. **DISC/TRACK SCAN INDICATOR (D.SCAN)**
Indicates that Disc Scan (or Track Scan) function is activated.
16. **DISC/TRACK REPEAT INDICATOR (D.RPT)**
Indicates that Disc Repeat (or Track Repeat) function is activated.

OPERATION

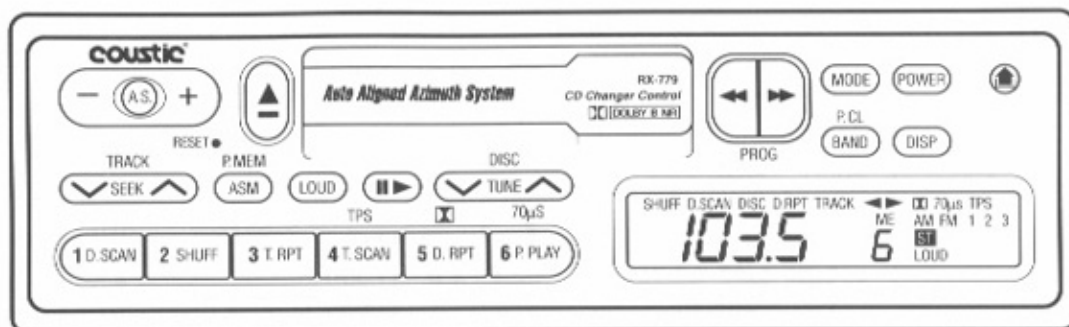


Figure 3. RX-779 Control Panel.

A. AUDIO ADJUSTMENT

1. Turn unit on.
2. To adjust **Volume**, press the + button to increase or the - button to reduce the output level of the receiver. The current level e.g. "**VOL : 40**" will be displayed on the LCD. Volume setting is available between 20 (min.) and 80 (max.).
3. The sequence for audio adjustment is as follows : **Volume** → **Bass** → **Treble** → **Balance** → **Fader** → **Volume**.

Pressing the **A.S.** button in succession will cycle through these functions.

Note: If the + or - buttons are not pressed after the desired mode is displayed, the audio adjust mode will return to volume adjust mode after 5 seconds.

4. To adjust **Bass**, press the **A.S.** button once. The current Bass level e.g. "**BAS : +2**" will be displayed on the LCD. Press the + button to increase or the - button to reduce the bass level.
5. To adjust **Treble**, press the **A.S.** button until the LCD displays "**TRE :**" followed by the level indication. Press the + button to increase or the - button to reduce the treble level.
6. For **Balance** adjustment, press the **A.S.** button until the LCD displays "**BAL :**" followed by the level indication. Press the + button to increase the Right level or the - button to increase the Left level.
7. To adjust **Fader**, press the **A.S.** button until the LCD displays "**FAD :**" followed by the level indication. Press the + button to increase the Rear level or the - button to increase the Front level.

Note: During automatic station search in tuner mode or fast forward/rewind in cassette play mode, audio adjustment is temporary prohibited.

B. CD CHANGER OPERATION

General Operation

1. Turn unit on.
2. Press the **MODE** button to switch from either Tuner mode or Tape mode to CD Changer mode. The changer will begin with the track last played before power off. Observe the disc and track indicators on the LCD display lighting up.
3. Adjust volume, bass, treble, balance and fader controls to the desired level.
4. To Pause the changer, press the **PLAY/PAUSE** button once. Observe the word "**PAUSE**" lighting up on the LCD. Press the **PLAY/PAUSE** Button again to resume play from the point at which it was stopped.
5. To select between Discs, press on either side of the Disc Select (**DISC**) button. It lets you easily search backward (**DISC**) or forward (**DISC**) to find a particular disc. Observe the disc number on the LCD display changes.
6. To select track, press the Backward Track Skip (**TRACK**) button once to search for a track that precedes the current track, or press the Forward Track Skip (**TRACK**) button once to search for a track that follows the current track. Observe the track number on the LCD changes.
7. To advance play forward at high speed to locate a particular section of a track, press and hold the Forward Disc Select (**DISC**) button during play. The LCD will indicate the time of the currently played track at a higher speed. To reverse play at high speed, press and hold the Backward Disc Select (**DISC**) button during play.

OPERATION

Other Functions

1. Track Intro Scan

The Track Intro Scan (**SCAN**) function lets you audition the first 10 seconds of each track on a disc. Press the Track Scan (**4 T.SCAN**) button once to activate Track Intro Scan. Observe the "**SCAN**" indicator on the display lighting up. When it reaches your desired track, press the (**4 T.SCAN**) button again to cancel Intro Scan. Playback of the chosen track will commence.

2. Discs Intro Scan

The Disc Intro Scan (**1 D.SCAN**) function lets you audition the first 10 seconds (of the first track) of each disc. Press the Disc Scan (**1 D.SCAN**) button once to activate Disc Intro Scan. Observe the "**D.SCAN**" indicator on the display lighting up. When it reaches your desired track, press the (**1 D.SCAN**) button again to cancel the Intro Scan function. Playback of the chosen disc will commence.

3. Repeat Track

The Repeat Track function lets you repeat the current track on the disc. Press the Track Repeat (**3 T.RPT**) button once. Observe the "**RPT**" indicator on the display lighting up. Press the (**3 T.RPT**) button again to cancel the function.

4. Repeat Disc

The Disc Repeat function lets you repeat the currently played disc. To activate Disc Repeat, press the (**5 D.RPT**) button once. Observe the "**D.RPT**" indicator on the display lighting up. Press the Disc Repeat (**5 D.RPT**) button again to cancel the function.

5. Shuffle Play

Shuffle Play lets you play the tracks on a disc in random sequence. To activate Shuffle Play, press the (**2 SHUFF**) button once. Observe the "**SHUFF**" indicator on the display lighting up. Tracks on the current disc will commence playback in random sequence. Press the (**2 SHUFF**) button again to cancel the function.

6. Programming of Tracks and Discs

The RX-779 is capable of storing 10 tracks into memory for programmed playback.

- Use the Up/Down Track or Up/Down Disc buttons to select the track to be stored into memory, then press the **P.MEM** button for more than 2 seconds and release. The LCD will indicate a program memory number (e.g. P-01) to be stored. Press the **P.MEM** button once again within 6 seconds while the memory number (e.g. "**01**") is still flashing to store this track into memory.
- Repeat the above procedure to store up to 10 tracks from any loaded discs into program memories P1 to P10.
- To activate program play, press the **P.PLAY** button once, the changer will begin playback tracks stored in memory. "**P-01**" will be indicated on the LCD.

Note: PROGRAM PLAY will not have any functions if no program is entered into memory.

- To clear the programmed memory, press the **P.CL** button for more than 2 seconds and then release. "**CLR**" will flash on the LCD. Press **P.CL** button again within 6 seconds to clear all memories.

- The RX-779 also features direct access to discs 1 to 6. Press and hold one of the six tuner preset buttons for more than 2 seconds will directly access the disc number pressed.
- In case of CD changer hang up and there is no effect by pressing any CD Changer function buttons, press the recessed Reset button (**RESET**) once with the tip of a ball-pen or pencil to reset the micro-processor of the CD Changer. This will clear all current changer functions and programmed memories. The changer will commence playback again.

C. TUNER OPERATION

- Turn unit on.
- Press Band Selector button for the desired reception band.
- Adjust volume, bass, treble, balance and fader controls to the desired level.

Following are six methods of operation in Tuner Mode:

1. Manual Tuning

- Press the Up Tuning (**TUNE ^**) or Down Tuning (**^ TUNE**) button to tune to the next higher or lower station on the frequency band.
- Activate fast UP/DOWN tuning by pressing and holding either the Up (**TUNE ^**) or Down (**^ TUNE**) Tuning button until you reach a desired station.

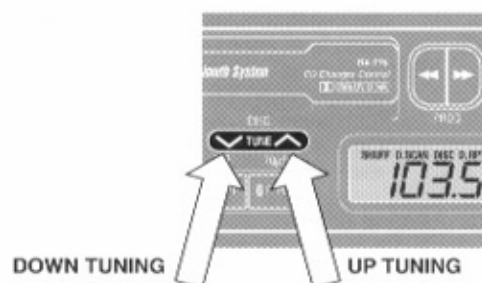


Figure 4. Manual Tuning.

2. Automatic Seek Tuning

Press the UP SEEK Tuning (**SEEK ^**) button once to activate Auto-Seek operation. The tuner will search up the frequency band for the next station, stopping when a station is detected. Press the UP SEEK Tuning (**SEEK ^**) button again to search the next station. Follow the same procedure described above for DOWN SEEK Tuning.

OPERATION

Other Functions

1. Track Intro Scan

The Track Intro Scan (**SCAN**) function lets you audition the first 10 seconds of each track on a disc. Press the Track Scan (**4 T.SCAN**) button once to activate Track Intro Scan. Observe the "**SCAN**" indicator on the display lighting up. When it reaches your desired track, press the (**4 T.SCAN**) button again to cancel Intro Scan. Playback of the chosen track will commence.

2. Discs Intro Scan

The Disc Intro Scan (**1 D.SCAN**) function lets you audition the first 10 seconds (of the first track) of each disc. Press the Disc Scan (**1 D.SCAN**) button once to activate Disc Intro Scan. Observe the "**D.SCAN**" indicator on the display lighting up. When it reaches your desired track, press the (**1 D.SCAN**) button again to cancel the Intro Scan function. Playback of the chosen disc will commence.

3. Repeat Track

The Repeat Track function lets you repeat the current track on the disc. Press the Track Repeat (**3 T.RPT**) button once. Observe the "**RPT**" indicator on the display lighting up. Press the (**3 T.RPT**) button again to cancel the function.

4. Repeat Disc

The Disc Repeat function lets you repeat the currently played disc. To activate Disc Repeat, press the (**5 D.RPT**) button once. Observe the "**D.RPT**" indicator on the display lighting up. Press the Disc Repeat (**5 D.RPT**) button again to cancel the function.

5. Shuffle Play

Shuffle Play lets you play the tracks on a disc in random sequence. To activate Shuffle Play, press the (**2 SHUFF**) button once. Observe the "**SHUFF**" indicator on the display lighting up. Tracks on the current disc will commence playback in random sequence. Press the (**2 SHUFF**) button again to cancel the function.

6. Programming of Tracks and Discs

The RX-779 is capable of storing 10 tracks into memory for programmed playback.

- Use the Up/Down Track or Up/Down Disc buttons to select the track to be stored into memory, then press the **P.MEM** button for more than 2 seconds and release. The LCD will indicate a program memory number (e.g. P-01) to be stored. Press the **P.MEM** button once again within 6 seconds while the memory number (e.g. "**01**") is still flashing to store this track into memory.
- Repeat the above procedure to store up to 10 tracks from any loaded discs into program memories P1 to P10.
- To activate program play, press the **P.PLAY** button once, the changer will begin playback tracks stored in memory. "**P-01**" will be indicated on the LCD.

Note: PROGRAM PLAY will not have any functions if no program is entered into memory.

- To clear the programmed memory, press the **P.CL** button for more than 2 seconds and then release. "**CLF**" will flash on the LCD. Press **P.CL** button again within 6 seconds to clear all memories.

- The RX-779 also features direct access to discs 1 to 6. Press and hold one of the six tuner preset buttons for more than 2 seconds will directly access the disc number pressed.





- In case of CD changer hang up and there is no effect by pressing any CD Changer function buttons, press the recessed Reset button (**RESET**) once with the tip of a ball-pen or pencil to reset the micro-processor of the CD Changer. This will clear all current changer functions and programmed memories. The changer will commence playback again.

C. TUNER OPERATION

- Turn unit on.
- Press Band Selector button for the desired reception band.
- Adjust volume, bass, treble, balance and fader controls to the desired level.

Following are six methods of operation in Tuner Mode:

1. Manual Tuning

- Press the Up Tuning (**TUNE** ) or Down Tuning (**TUNE** ) button to tune to the next higher or lower station on the frequency band.
- Activate fast UP/DOWN tuning by pressing and holding either the Up (**TUNE** ) or Down (**TUNE** ) Tuning button until you reach a desired station.

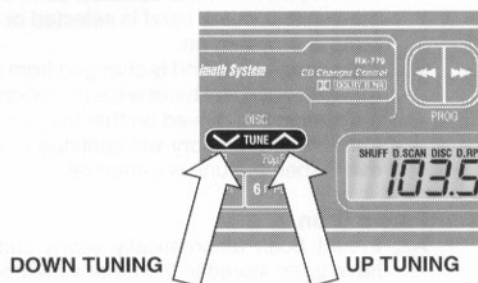




Figure 4. Manual Tuning.

2. Automatic Seek Tuning

Press the UP SEEK Tuning (**SEEK** ) button once to activate Auto-Seek operation. The tuner will search up the frequency band for the next station, stopping when a station is detected. Press the UP SEEK Tuning (**SEEK** ) button again to search the next station. Follow the same procedure described above for DOWN SEEK Tuning.

OPERATION

3. Memory

- A. The Tuner is capable of storing 18 FM and 12 AM stations into its memory. Select a station either by Manual or Auto-Seek Tuning.
- B. When a desired station is reached, press one of the memory preset buttons for at least 2 seconds to store the station's frequency into memory. The tuner will mute momentarily and the memory symbol ("ME"), the selected memory ("1-6"), and the frequency of the station will appear on the LCD Display.
- C. To program desired stations into memory, repeat steps A & B above, pressing buttons 2, 3... 6.
- D. To recall a station from memory, press a memory preset button once. The memory symbol ("ME") and station number (e.g., "1") will appear on the LCD.

4. Automatic Station Memory

- A. This feature enables the tuner to automatically search and store the 6 strongest transmitting stations in each band.
- B. Press the Automatic Station Memory button (ASM) for at least 2 seconds. The tuner will search through the band storing the 6 strongest stations in ascending frequency.
- C. After completing Automatic Station Memory operation, the tuner will resume normal radio reception on preset station number 1.

CAUTION: Automatic Station Memory will replace any existing preset station memories on the frequency band.

5. Last Station Memory

- A. This feature enables the tuner to return to the last station played on the selected band every time the corresponding band is selected or when the tuner is powered on.
- B. If the frequency band is changed from AM to FM (or vice versa), the tuner will automatically tune to the station last played on that frequency band.
- C. Last Station Memory will continue to be stored even when the unit is turned off.

6. Preset Scan

- A. Preset Scan automatically scans stations that have been stored in the tuner's memory banks.
- B. Press the Preset Scan button (ASM) once to initiate the scan. The tuner will scan each preset station (18 in FM band or 12 in AM band), stopping for five seconds before continuing on to the next station. The memory number (e.g., "1") will flash on the LCD Display.
- C. To cancel Preset Scan, press the ASM button again. The tuner will lock on the preset station selected.

Note: The Preset Scan function will not scan preset stations which have a weak reception.

D. TAPE OPERATION

1. Basic Function

- A. Insert cassette tape into cassette tape loading slot with the open side facing right (see Figure 5).
- B. Adjust volume, bass, treble, balance and fader controls to your listening preference.

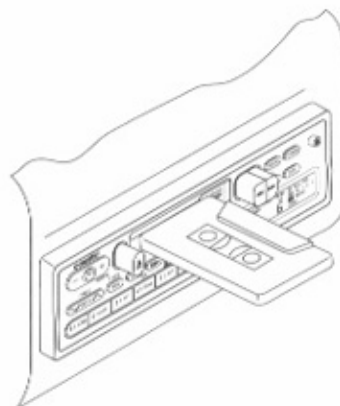


Figure 5. Loading Cassette Tape.

- C. Select the Metal Tape Equalization (70 μ S) function when using metal tape, Cr02 tape, or II series tape (70 μ S equalization).
- D. To reverse tape movement direction, depress both Fast Rewind and Fast Forward buttons simultaneously. Both tape direction and direction indicator will automatically change. Right arrow (▶) indicates forward playback of tape and left arrow (◀) indicates reverse playback.
- E. Push the Eject button (▲) to eject a loaded cassette tape.
- F. This unit employs a fully automatic reverse deck mechanism. When the tape reaches one end, its direction reverses automatically and playback of the cassette's other side begins. The Automatic Reverse Playback function will continue indefinitely until the cassette tape is ejected or until tape mechanism is turned off.

Note: The Fast Forward (▶▶) button and Rewind (◀◀) button will advance or rewind according to the current playback direction regardless of whether the player is in forward or reverse playback mode.

OPERATION

2. Tape Program Search (TPS)

- A. To search tape programs rapidly, first press the Tape Program Search (TPS) button. The symbol "TPS" will appear on the LCD Display.
- B. Press the Fast Forward (▶▶) or Fast Rewind (◀◀) button. The unit will search for the beginning of the next song (Fast Fwd) or the beginning of the previous song (Fast Rwd).
- C. Be sure to deactivate the Tape Program Search feature by pushing the TPS button again or unit will stop at each song in Fast Forward or Rewind Mode.

3. Dolby® B NR

This unit is equipped with a Dolby® B Noise Reduction system.

- A. To activate the Dolby® B NR circuitry for playback of tapes encoded with Dolby® B NR system, press the Dolby® (DB) button. The symbol "DB" will appear on the LCD display.
- B. Press the (DB) button again to deactivate the Dolby® NR circuit.

E. AUXILIARY / (EXTERNAL) COMPACT DISC INPUT

If a CD changer is not connected to the RX-779 via the DIN terminal, a pair of RCA jacks labelled as "AUX INPUT" can be used for connection with an external source such as a CD or Cassette Walkman or a stand-alone CD changer/ Controller system.

Caution: Do not use this input to connect to any source if a CD Changer is connected via the DIN terminal. The CD changer connection will disable the AUX input function.

1. To activate Auxiliary Input, first turn the unit on, press the **MODE** button once. The symbol "Cd" will appear on the LCD Display.
2. Adjust volume, bass, treble, balance, and fader controls to suit your listening preference.
3. Operate external CD/Auxiliary unit for program source.
4. Press the **MODE** button again to return to Tuner/Tape Mode.

F. DIGITAL CLOCK SETTING

1. To set the correct time on the digital clock, the unit must be POWERED OFF with the vehicle's ignition on. The LCD should display the time.
2. Press the "DISP" button for more than 2 seconds to entered clock setting mode. The digits indicating Hour will flash.
3. Press the + button to advance the hour setting or press the - button to set the hour backwards to the desired reading.
Note: If the + or - buttons are not pressed while the display is flashing, the clock setting mode will be cancelled and the display will return to regular time display after 5 seconds.
4. Press the "DISP" once, the digit indicating Minute will flash. Press the + button to advance the minute setting or press the - button to bring the minute setting backwards to the desired reading.

INSTALLATION PREPARATION

A. CAUTION:

1. **ALWAYS DISCONNECT THE SYSTEM FROM THE BATTERY BEFORE ATTEMPTING TO MAKE OR ALTER ANY CONNECTIONS.**
2. Be sure to follow the step-by-step directions, check all important points, and have every item necessary for installation on hand.
3. Check to make sure the vehicle's battery is in good condition for proper operation of the RX-779.
4. The RX-779 is designed for use in 12-volt **NEGATIVE GROUND** electrical systems **ONLY**. Installing this product in any positive ground electrical system will seriously damage the audio system as well as void the product warranty.
5. A set of tools and hardware is required. See the following **TOOLS REQUIRED** list.
6. Should the RX-779 be installed or used in any method other than that outlined in this manual, it could reduce the unit's performance capabilities as well as void the product warranty.

B. TOOLS REQUIRED

1. Electric drill/drill bits.
2. Saber saw/fine tooth metal cutting blades.
3. Razor knife.
4. Philips and flathead screwdrivers.
5. Pliers (standard and needle nose).
6. Wire cutters/strippers.
7. Crimping tool.
8. Electrical tape or heat shrink tube for professional finish.
9. Soldering iron and solder.
10. Nylon tie wraps.
11. Volt/Ohm meter (VOM).

MECHANICAL INSTALLATION

A. MOUNTING LOCATION

1. Select a mounting location that is convenient and easily accessible (usually in the dash).
2. Do not mount unit near engine or any heat generating ducts as doing so will damage the unit as well as void the product warranty.
3. The RX-779 is a standard DINE chassis. The opening required is 2 1/8 inches (53 mm) x 7 1/16 inches (182 mm), (see Figure 6).
4. Make sure there is a clearance of at least seven inches (178 mm) behind the dash (see Figure 7).



Figure 6. Opening Required

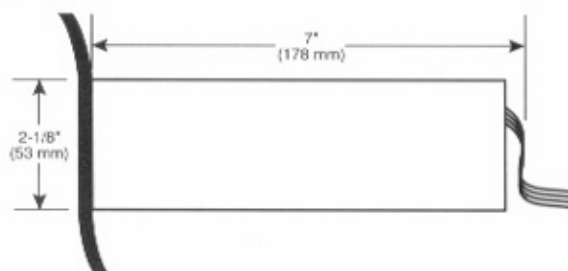


Figure 7. Depth Required.

MECHANICAL INSTALLATION

B. INSTALLATION

1. If your car is domestic, (Ford, GM, etc.), check to make sure you have enough room (i.e. height, width, and depth) before attempting installation. You will probably need an installation kit. Contact American International, Metra, Schoshe, or your local Coustic dealer.
2. Mount unit at an angle no greater than 30° to the horizontal.

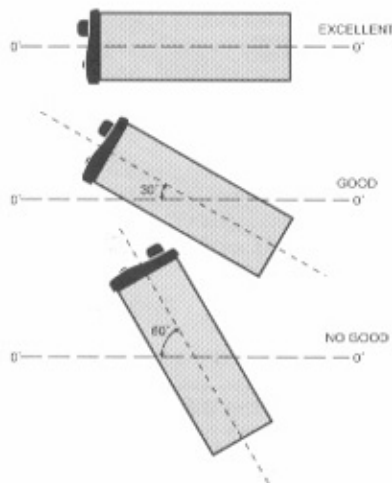


Figure 8. Mounting No More than 30° to the Horizontal.

3. Use the RX-779 mounting sleeve to check the dash opening. Make sure mounting sleeve can slide easily into the dash opening but without excessive play (no more than $1/16"$ or 1.5 mm on all sides).
4. Secure the mounting sleeve to the dashboard by bending the flanges 90° . Use a screwdriver and/or pair of needle nose pliers, if necessary (see Figure 9).

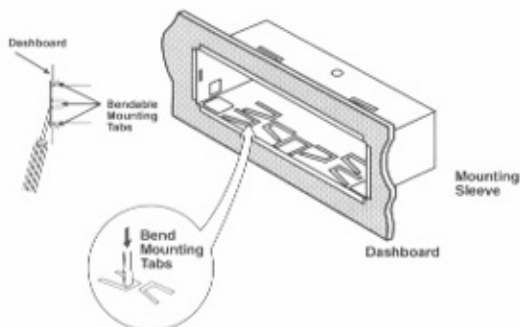


Figure 9. Securing the Mounting Sleeve.

CAUTION: BE CAREFUL NOT TO SCRATCH THE DASHBOARD WHEN BENDING THE FLANGES

5. In some vehicles, the firewall provides a bushing support for the rear of the unit. Check the firewall for this bushing support before installing the unit (see Figure 10). If the support is available, insert the rubber grommet (supplied) to the stud at the back of the unit and slide the unit into place as shown in Figure 10.

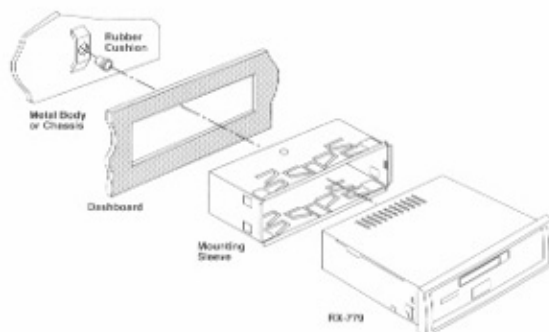


Figure 10. Bushing Support for Unit

6. If you were able to secure the unit properly in steps 4 and 5 above, go to step 7. If not, secure the rear of the unit to your car by fastening the metal strap (supplied) as shown in Figure 11.
7. Slide unit slowly into mounting sleeve until the spring locks snap. The unit is now securely locked inside the dash.

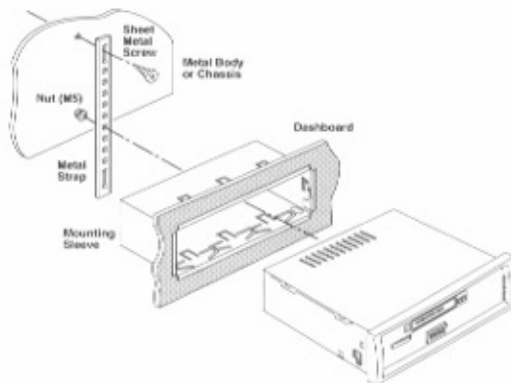


Figure 11. Securing the Rear of Mounting Sleeve.

MECHANICAL INSTALLATION

8. To remove the unit, remove the front panel first (refer to Section "Installing and Removal of Front Panel". Unfasten the metal strap from the rear of the unit. Insert two release forks into the mounting slots (see Figure 12) to engage the spring-loaded lockers. Press the release forks downward and pull the unit out of the mounting sleeve. Disconnect wiring.

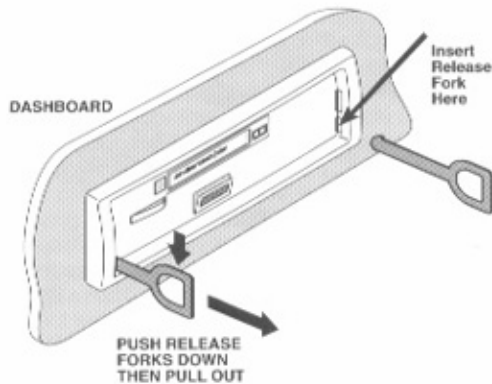


Figure 12. Removing the RX-779.

C. INSTALLATION AND REMOVAL OF FRONT PANEL

The RX-779 front panel is housed in a protective case (supplied) to protect it from scratches and breakage. To install the panel to the main unit, press the left side of the panel against the spring-loaded hinge on the main unit gently (Figure 13) until the panel snaps onto the hinges. Then press the right side of the panel into the cavity of the main unit until a "Click" sound is heard, indicating that the panel is locked to the unit.

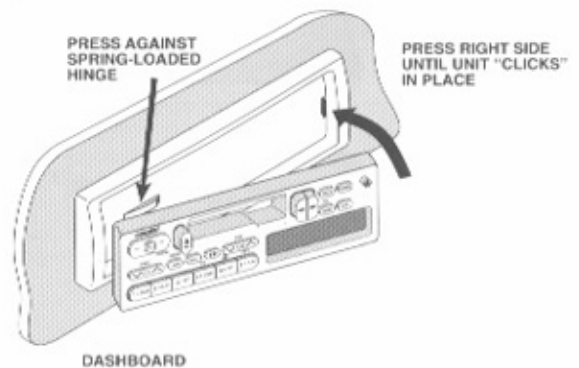


Figure 13. Installing Front Panel to Main Unit

To remove the panel, press the Release button on the upper right hand corner of the panel. Pull it away from the main unit gently by grabbing the right edge of the panel.

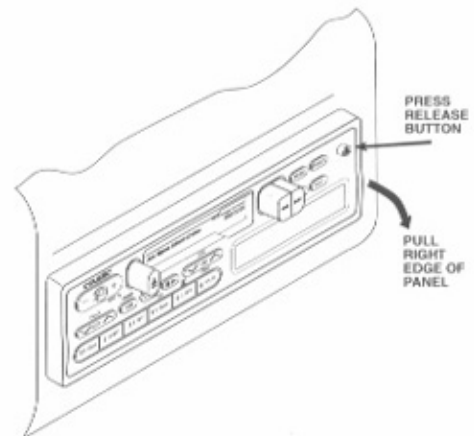


Figure 14. Removal of Front Panel

CAUTION : Make sure to turn the RX-779 off before removing front panel. Failure to follow this instruction may damage the micro-processor and render the unit non-functional.

ELECTRICAL INSTALLATION

The Coustic RX-779 is equipped with its own electrical wiring harness. As types of audio cable used often vary, audio cables are not included with the RX-779. Choose the audio cable that best fits your budget and performance preference.

A. ELECTRICAL WIRING PRECAUTIONS

Following are some basic wiring procedures:

1. For safety, disconnect battery ground cable before installation.
2. Make wiring connections from one component to the next. Be sure that you plug outputs into inputs and not inputs into inputs.
3. It is best to route all wires along with existing electrical wiring in your vehicle to conceal them from view. This may call for removal of kick panels, door sills, etc.
4. Remember exactly how you removed each part from your vehicle, so it can easily be replaced. Put screws and other hardware into a container to reduce chances of losing them.
5. To both protect and conceal wires, we recommend using automotive flexible plastic tubing (see Figure 15). For ease of handling, we recommend using plastic tie-wraps (see Figure 15).

CAUTION: DO NOT ROUTE AUDIO CABLE AND POWER CABLE TOGETHER! THIS CAN CAUSE ENGINE NOISE IN YOUR AUDIO SYSTEM.

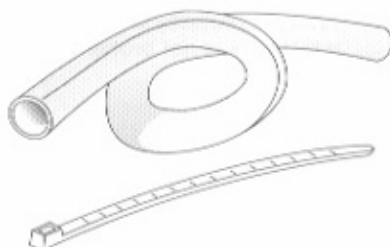


Figure 15. Flexible Plastic Tubing and Tie-wraps.

B. WIRING DESCRIPTIONS

The following table lists the wiring code and the connection points used in the Electrical Installation of the RX-779.

ELECTRICAL	PRIME CONNECTION	DESCRIPTION
RED	SWITCHED +12 V DC	Connect to a switched +12 V DC source.
BLACK	GROUND	Connect to vehicle's chassis ground (bare metal).
YELLOW	BATTERY +	Connect to the positive battery terminal, constant +12 V DC source (memory back-up).
BLUE	POWER ANTENNA/ REMOTE AMPLIFIER TRIGGER	Connect to relay of electrical antenna (if available). If using RX-779 to turn on external amplifier, connect to remote triggering terminal of power amplifier.
WHITE	FRONT LEFT SPEAKER +	Connect to positive terminal (+) of front left speaker.
WHITE/BLACK	FRONT LEFT SPEAKER -	Connect to negative terminal (-) of front left speaker.
GREEN	REAR LEFT SPEAKER +	Connect to positive terminal (+) of rear left speaker.
GREEN/BLACK	REAR LEFT SPEAKER -	Connect to negative terminal (-) of rear left speaker.
GRAY	FRONT RIGHT SPEAKER +	Connect to positive terminal (+) of front right speaker.
GRAY/BLACK	FRONT RIGHT SPEAKER -	Connect to negative terminal (-) of front right speaker.
VIOLET	REAR RIGHT SPEAKER +	Connect to positive terminal (+) of rear right speaker.
VIOLET/BLACK	REAR RIGHT SPEAKER -	Connect to negative terminal (-) of rear right speaker.
ANTENNA INPUT	EXTERNAL ANTENNA	Connect from external antenna to RX-779.
FRONT LINE LEVEL OUTPUT (GRAY)	RX-779 TO EXTERNAL POWER AMPLIFIER	Connect from front outputs of RX-779 to external power amplifier.
REAR LINE LEVEL OUTPUT (GRAY)	RX-779 TO EXTERNAL POWER AMPLIFIER	Connect from rear outputs of RX-779 to external power amplifier.
DIN TERMINAL	RX-779 TO CC-101	Connect Coustic CC-101 CD Changer to RX-779.
AUX INPUT (BLACK)	AUX SIGNAL SOURCE	Connect from pre-amp output of external CD player or any external source to RX-779. See Electrical Installation Section D.

ELECTRICAL INSTALLATION

C. ELECTRICAL WIRING

CAUTION: THIS UNIT HAS A BUILT-IN HIGH POWER AMPLIFIER. DO NOT CONNECT ANY SPEAKER TERMINAL TO GROUND AND DO NOT SHORT ANY SPEAKER WIRES TOGETHER. IMPROPER GROUNDING AND SHORTING OF WIRES WILL DAMAGE UNIT AS WELL AS VOID PRODUCT WARRANTY. ALL POSITIVE AND NEGATIVE SPEAKER WIRE PAIRS FROM THIS UNIT MUST BE CONNECTED DIRECTLY TO EACH SPEAKER TERMINAL PAIR. TO AVOID UNNECESSARY DAMAGE TO UNIT, BE SURE TO CONNECT THE RED POWER WIRE (B+) BEFORE CONNECTING TO GROUND.

CAUTION : Always connect the yellow wire to a constant +12 V. The CD changer will not receive power from the RX-779 if this wire is not properly connected.

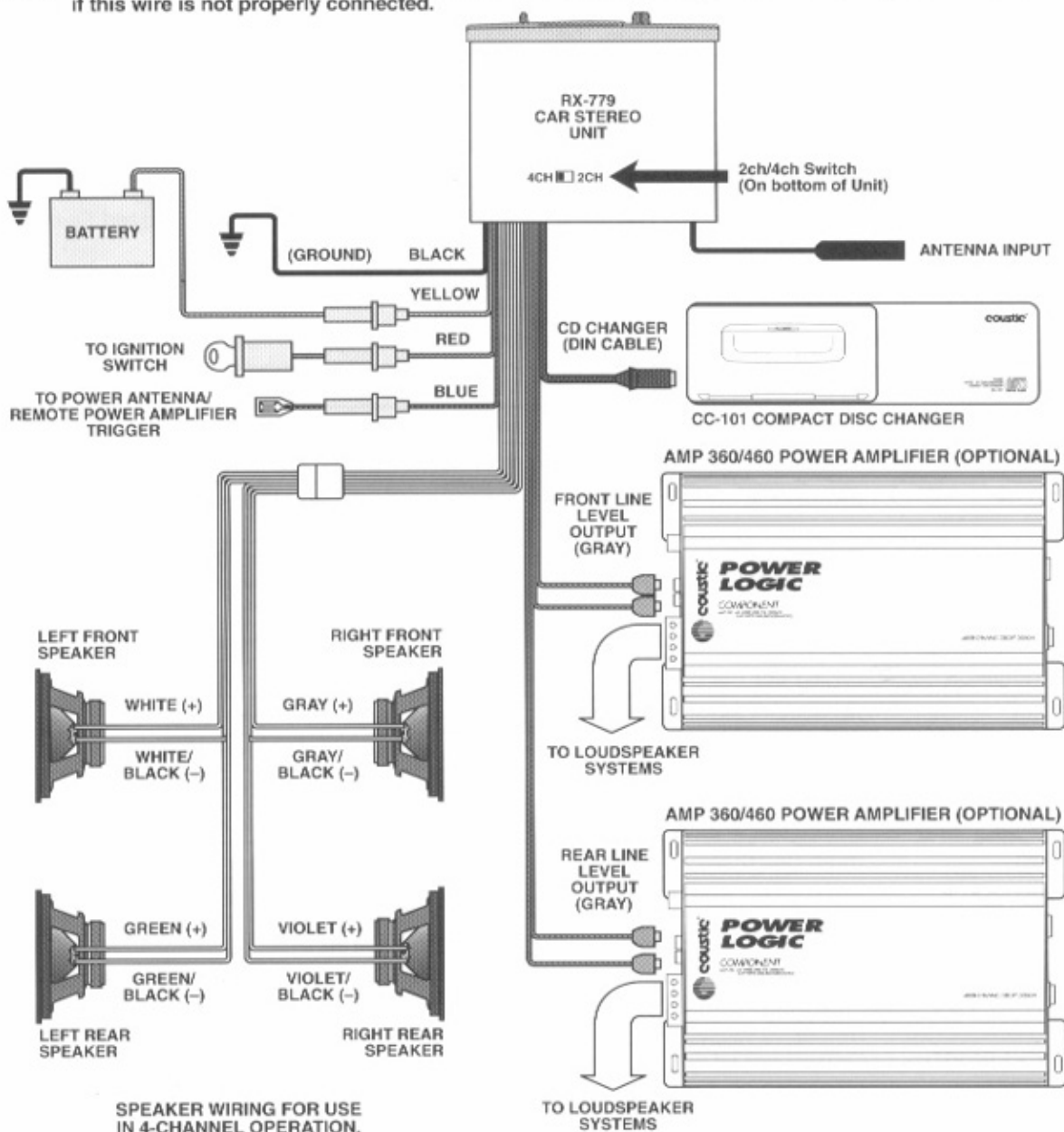


Figure 16. Electrical Wiring Diagram for 4-Channel Operation.

ELECTRICAL INSTALLATION

CAUTION: THIS UNIT HAS A BUILT-IN HIGH POWER AMPLIFIER. DO NOT CONNECT ANY SPEAKER TERMINAL TO GROUND AND DO NOT SHORT ANY SPEAKER WIRES TOGETHER. IMPROPER GROUNDING AND SHORTING OF WIRES WILL DAMAGE UNIT AS WELL AS VOID PRODUCT WARRANTY. ALL POSITIVE AND NEGATIVE SPEAKER WIRE PAIRS FROM THIS UNIT MUST BE CONNECTED DIRECTLY TO EACH SPEAKER TERMINAL. ~~PAIR TO AVOID UNNECESSARY DAMAGE TO UNIT, BE SURE TO CONNECT THE RED POWER WIRE (B+)~~ BEFORE CONNECTING TO GROUND.

CAUTION : Always connect the yellow wire to a constant +12 V. The CD changer will not receive power from the RX-779 if this wire is not properly connected.

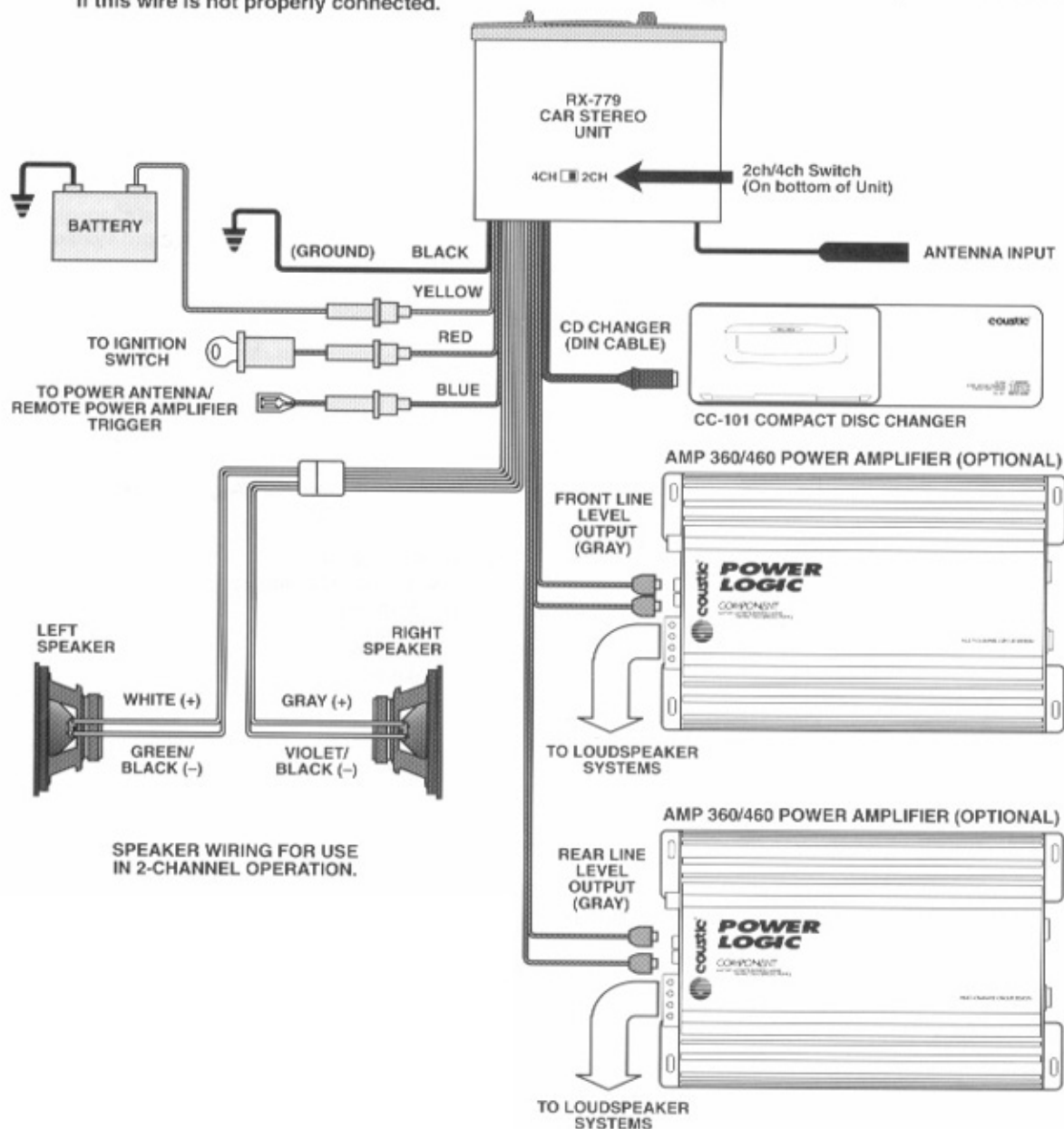


Figure 17. Electrical Wiring Diagram for 2-Channel Operation

ELECTRICAL INSTALLATION

D. AUX INPUT TERMINAL

The RX-779 is designed with a Auxiliary/External CD Input to accommodate an external digital compact disc player or any other line level signal source if a CD changer is not connected via the DIN terminal.

CAUTION: Do not use this input if a CD Changer is already connected to the RX-779 via the DIN terminal. The CD changer connection will disable the AUX input function.

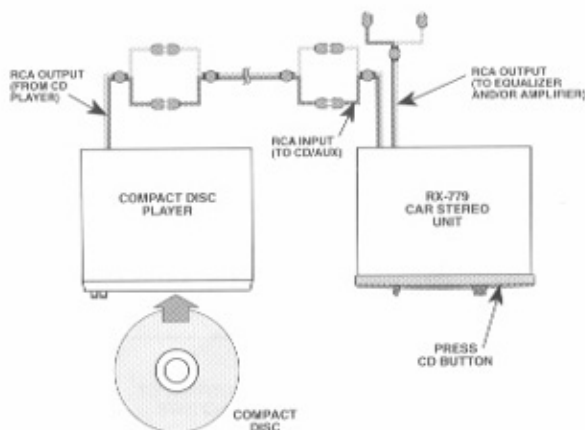


Figure 18. Connecting the AUX Input.

FINAL SYSTEM CHECK

The RX-779 is now ready for preliminary testing and noise check. Before beginning preliminary testing and noise check connect battery ground cable (refer to "ELECTRICAL INSTALLATION" for details).

A. PRELIMINARY TESTING

1. Activate ON/OFF button.
 - A. Set volume control to a comfortable listening level.
 - B. Set tone controls to their center (flat) positions.
 - C. Center balance control.
 - D. Center fader control.
2. **BE CAREFUL!** Do not overdrive system; a surge of high power from amplifiers could damage audio components.
3. Slowly turn volume up and listen carefully for:
 - A. **Obvious distortion.** If sound is obviously distorted, turn system off and refer to the "Trouble Shooting Guide" at back of this manual.
 - B. **No sound! No hiss! Total silence! If you hear no sound and no hiss, turn system off immediately!** Double check all power connections. Use Volt/Ohm meter (VOM) to make sure there is good chassis ground for each component that needs to be grounded, and good B+ (12 volt positive) at all power inputs. After making the necessary corrections, slowly turn power on. If symptoms persist, refer to the "Trouble Shooting Guide" at the back of this manual.
 - C. **No display.** If clock time is not displayed on the LCD panel, switch off the system. Refer to the "Trouble Shooting Guide" at the back of this manual.

B. NOISE CHECK

Now you can check the entire audio system for noise.

1. Start engine.
2. Switch audio system on.
3. Rev engine and vary volume of audio system to determine if there is any unwanted noise.
4. If audio system exhibits a whine or tic-tic noise, turn both audio system and engine off. Refer to the "Trouble Shooting Guide" at back of this manual.
5. If audio system evidences no noise, then double check wiring cables for safe placement.

CARE AND MAINTENANCE

A. CASSETTE CARE AND MAINTENANCE

1. After systematic use, the quality of tape reproduction is likely to deteriorate steadily. This may be caused by build-up of small particles of tape material on tape head as a result of normal friction. It may also be caused by dust penetrating the cassette compartment. If no action is taken, complete loss of output on one or both channels may result.
2. To ensure high quality reproduction, the tape head should be cleaned regularly (about every 20 hours of playing time).
3. Insert a special head cleaning cassette into tape compartment and allow it to run a few minutes to remove any foreign matter. A soft cotton swab moistened with alcohol or special head cleaning fluid may also be used to clean the tape head.
4. C-30, C-60 & C-90 tapes are recommended for use with the RX-779. Avoid using C-120 tapes as they are too thin and can easily tangle up in the tape mechanism.
5. Before inserting a cassette tape into the unit, look through the cassette window to make sure there is no excessive slack (loose turns). If necessary, take up extra slack by inserting a pencil or similar object into the reel hub and rotating it (see Figure 19).
6. Do not tamper with the tape head or place any metallic object into the cassette tape slot.
7. Avoid touching the exposed portion of the tape.

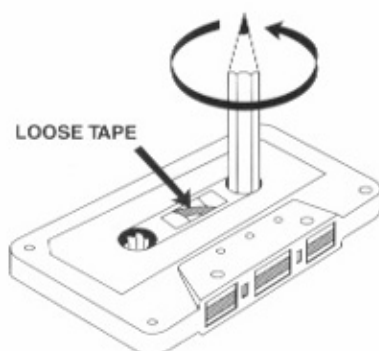


Figure 19. Taking Up Tape Slack.

B. FUSE REPLACEMENT

If unit does not operate when switched on or the LCI display does not light up, check the fuse.

1. Turn unit off.
2. Push and twist fuse holder. It will spring apart. Check fuse and replace, if necessary. Use a standard 30 mr fuse with these ratings only: Power supply — 6 AMF; memory — 2 AMP; power antenna/remote amplifier — 2 AMP.
3. Reassemble fuse holder by pushing and twisting the two parts together until they snap.

TROUBLE SHOOTING GUIDE

SYMPTOM	PROBABLE CAUSES AND SOLUTIONS
1. " disc " appears on LCD in CD changer mode.	<ul style="list-style-type: none"> No loaded discs in changer magazine.
2. " FOCUS " appears on LCD in CD changer mode.	<ul style="list-style-type: none"> CD incorrectly loaded into magazine — labelled side should be facing up.
3. " HOT " appears on LCD in CD changer mode.	<ul style="list-style-type: none"> Temperature in changer too hot for normal operation, the changer will shut down temporarily to protect the electronics from overheating. Unit will return to normal operation after cooling down.
4. " Err " appears on LCD in CD changer mode.	<ul style="list-style-type: none"> Press reset button on front panel to reset micro-processor. Mechanical problem occurred in changer, magazine cannot be ejected. Contact your Coustic dealer.
5. " EJt " appears on LCD in CD changer mode.	<ul style="list-style-type: none"> No disc magazine in changer. Insert loaded magazine into changer.
6. There is a whining noise that increases and decreases as you vary the volume of all sound sources (FM, AM or TAPE) when the engine is running and the audio system is at a normal listening level.	<ul style="list-style-type: none"> Install a 6-amp in-line filter on Red power wire of RX-779. If this procedure does not eliminate the noise, the alternator diodes or the voltage regulator may not be functioning properly and may need to be repaired or replaced.
7. You hear a "motor-boating" sound when engine is running and the audio system volume is set at a reasonably high level.	<ul style="list-style-type: none"> Check the red power wire connection. Make sure it is connected directly to the battery Check system's ground point to see that it makes good contact with the chassis ground (bare metal).
8. No sound. Audio system is not receiving power and there is no display on LCD.	<ul style="list-style-type: none"> Check battery cables for a tight connection. Check all fuses. Check all power wire connections; use Volt/Ohm meter to ensure that system is receiving +12 V DC.
9. The RX-779 is very hot with the system on and volume set at a normal listening level. As you increase volume, the sound turns on and off at even intervals.	<ul style="list-style-type: none"> Check system's ground point; it must make good contact with chassis ground (bare metal). Speakers are shorted to ground. Use Volt/Ohm meter to check speaker connection; and make necessary corrections.
10. When using the power antenna/ remote amp trigger lead to remotely turn-on amplifier or electrical antenna, the antenna or amplifier does not function.	<ul style="list-style-type: none"> Check to see if fuse is blown. Note that this lead is only intended for triggering, not for current supply (a relay must be used to trigger the power antenna).
11. When audio system is in TAPE MODE only and engine is running, there is a whining noise that increases and decreases as volume level is varied.	<ul style="list-style-type: none"> This is "radiated" noise, and this problem is NOT caused by the RX-779. Contact your local retailer/installer as the problem is beyond the scope of this manual.
12. When audio system is in FM or AM Mode and engine is running, there is a rapid ticking sound that increases and decreases as volume level is varied.	<ul style="list-style-type: none"> This is "radiated" spark noise, and the problem is NOT caused by the RX-779. Contact your local retailer/installer as the problem is beyond the scope of this manual.

TROUBLE SHOOTING GUIDE

SYMPTOM	PROBABLE CAUSES AND SOLUTIONS
13. Audio system sounds good, but weak. Bass is not normal. If you adjust balance control left to right at both extremes, there is more bass than at center position.	<ul style="list-style-type: none">• Speakers are "out of phase" to each other, and are cancelling bass out. Check wiring from radio to speakers and make sure "+" goes to "+" and "-" goes to "-".
14..Fader does not function on speaker outputs.	<ul style="list-style-type: none">• Check to see that speakers are wired correctly.
15. Radio and tape operate, but radio does not retain any of the stored preset station memories.	<ul style="list-style-type: none">• Check yellow memory wire, it must be connected directly to battery and not to a switched +12 V.• Check fuse and wire for proper connection.

SPECIFICATIONS

TAPE SECTION

Cassette Mechanism:	Auto Reverse with Auto-Aligned Azimuth™ System and Tape Program Search
Wow & Flutter:	< 0.15% WRMS
S/N Ratio:	50 dB
	65 dB with Dolby B NR
Separation:	35 dB
Frequency Response:	30 - 18,000 Hz \pm 5 dB (Maxell UD-XL IIS-70 μ S)

RADIO SECTION

	FM	AM
Range:	87.5 to 108.0 MHz	520 to 1720 KHz
Usable Sensitivity:	1.8 μ V for S/N 30 dB	28 μ V for S/N 20 dB
I. F. Rejection:	75 dB	45 dB
Image Rejection:	55 dB	60 dB
Selectivity:	—	35 dB
S/N Ratio:	65 dB	50 dB
Stereo Separation:	38 dB	—

GENERAL

Power Source:	13.8 volts DC negative ground
Input Current:	6 amps maximum
Distortion:	0.09% at 1 KHz, 1 Watt
Frequency Response:	20 to 25,000 Hz \pm 5 dB
Bass Control:	\pm 15 dB at 100 Hz
Treble Control:	\pm 13 dB at 10 KHz
Loudness Control:	+10 dB at 100 Hz +5 dB at 10 KHz
CD/Aux. Input Impedance:	300 mV
Output Impedance	
Pre-amp Output:	800 mV at 4.7 K Ohms
Speaker Output:	4 to 8 Ohms
Output Power	
4-Channel:	5 Watts x 4 RMS
2-Channel (bridged):	15 Watts x 2 RMS
Chassis Dimensions:	7" W x 2" H x 6" D (178 W x 50 H x 150 D mm)

DUE TO ONGOING RESEARCH AND PRODUCT IMPROVEMENTS, WE RESERVE THE RIGHT TO UPDATE THE LISTED FEATURES AND SPECIFICATIONS WITHOUT ANY PRIOR NOTICE.